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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,381	11/24/2000	Krister Hansson	TPP 31351	3726

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EXAMINER

VANORE, DAVID A

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,381

Applicant(s)

HANSSON ET AL.

Examiner

David A Vanore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 18 is/are rejected.
- 7) ☒ Claim(s) 6, 8-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Objections

Claims 1-18 are objected to because of the following informalities: All claims carry the limitation of a "radiation curing lacquer". Lacquer cannot cure radiation. An appropriate term would be a "radiation curable lacquer" or "lacquer cured by radiation". Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the process set forth in claims 1-18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the wear layer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by van der Hoeven.

van der Hoeven teaches a device and method for manufacturing a decorative surface element having a base layer (1), and a plurality of layers formed above said base layer forming a decorative upper surface and radiation cured polymer coating (Layers 2, 3, 6). The process laid out in van der Hoeven teaches that a plurality of radiation curable lacquers are laid out on top of the base layer. Between the lacquer and the base is the decorative layer (3) which receives an intermediate curing of UV or electron radiation (Col. 9 Line 1-38) as recited in claim 3. Furthermore, van der Hoeven teaches that the material used as the lacquer is an acrylic (Col. 5 Line 1-68) as recited in claim 2.

Regarding claims 4-5, van der Hoeven teaches a radiation curable lacquer comprising particles in the range of fifty nanometers to one hundred fifty nanometers (Col. 7 Lines 21-23) in that the thickness of the film recited is at least within that range, meaning that particles comprising a layer also lie within that range. Furthermore,

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lacquer (called resin by van der Hoeven), contains silica and aluminum oxide (Col. 6 Lines 17-24) as recited in claim 5.

Allowable Subject Matter

Claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest the following:

1) A method of manufacturing a decorative surface element wherein the material to form the layer is dispensed from an ink-jet printing means as described in claim 8. Claims 9-11 are indicated as being allowable based on their dependency from claim 8.

2) A method of manufacturing a decorative surface element wherein the decorative surface element comprises a décor layer and a wear layer where the wear layer is applied on top of the décor layer and the radiation cured lacquer is applied on top of the wear layer as recited in claim 12. Claims 13-15 are indicated as being allowable by virtue of their dependency.

3) A method of manufacturing a decorative surface element where the decorative surface element comprises a decorative upper surface and a décor layer where the décor layer has features which are stored digitally and the surface structure formed by an applied radiation curable lacquer matches the layout of the décor features

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as recited in claim 16. Claim 17 is indicated as being allowable based on its dependency from claim 16.

4) A method of manufacturing a decorative surface element where a radiation curable lacquer is applied only on top of a decorative pattern and the lacquer comprises hard particles consisting of diamond particles as recited in claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following US Patent documents are teachings relating to the creation of multiple layered structures using radiation cured compounds:

US Patent 6,214,279 (Yang et al.); US Patent 6,165,406 (Jang et al.) ;
US Patent 6,129,872 (Jang) ; US Patent 4,388,137 (McCarty et al.);
US Patent 4,008,401 (Holoubek et al.); US Patent 4,186,044 (Bradley et al.);
US Patent 4,119,479 (Williams, Jr. et al.); US Patent 4,844,764 (Nablo et al.)
US Patent 6,406,585 (Taubert); US Patent 4,073,671 (Licata);
US Patent 6,110,315 (Keding); US Patent 4,065,340 (Dickerson);
and US Patent 4,284,453 (Endrizzi)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Vanore whose telephone number is 703-306-0246. The examiner can normally be reached on M-F 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

dav
March 13, 2003


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800